

**An Acute Gastroenteritis Outbreak of Unknown Etiology  
Associated with Montana Mike's Steakhouse — McPherson County, May 2008**



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## **Background**

On May 31, 2008, the Kansas Department of Health and Environment (KDHE), Office of Surveillance and Epidemiology (OSE) was notified by the KDHE Bureau of Consumer Health (BCH) of a possible foodborne illness outbreak at Montana Mike's Steakhouse, 2211 E. Kansas Ave., in McPherson, Kansas. Several patrons developed acute onset of nausea and vomiting after eating at the restaurant on May 30 and May 31. Because many of the patrons were exhibiting symptoms of illness while still at the restaurant and because the etiology of the illness was uncertain, the owner of the establishment closed the restaurant on the evening of May 31 in order to thoroughly clean the facility. The restaurant reopened on June 1. On June 2, KDHE and the McPherson County Health Department initiated an outbreak investigation to determine the cause of illnesses and to provide prevention and control measures.

## **Methods**

### *Epidemiologic*

Staff from the local health department conducted preliminary interviews with individuals who initially reported symptoms. To determine if illness was associated with a specific menu item, a case-control study was conducted among patrons of Montana Mike's who ate at the restaurant from May 29 to June 1, 2008. A questionnaire was developed and interviews with the cases and controls were administered by telephone by staff of the Behavioral Risk Factor Surveillance Survey (BRFSS) program housed in the KDHE Office of Health Promotion. Controls for the study were well meal companions of ill individuals identified by the local health department and patrons from credit card receipts provided by the owner.

A case was initially defined as a patron who dined at Montana Mike's from May 27 to June 1 and subsequently became ill with vomiting or diarrhea (3 or more loose stools within a 24-hour period) within 24 hours. However, for the case control study, a case was defined as a patron who dined at Montana Mike's from May 29 to June 1 and developed vomiting or diarrhea (3 or more loose stools within a 24-hour period) within 24 hours. A control was defined as a patron who dined at Montana Mike's from May 29 to June 1 and did not develop any gastrointestinal symptoms within 24 hours.

Four controls were randomly selected and matched to one case by date of exposure to the restaurant. Descriptive analyses and univariate conditional logistic regression were performed in SAS 9.1 to assess food exposures that were significantly associated with illness.

### *Laboratory*

No clinical specimens were collected from ill persons for microbiological testing. No food samples were available for collection and testing.

### *Environmental*

An inspection of the restaurant was conducted by KDHE-BCH on June 1. A self-administered questionnaire was distributed to all employees at the facility to assess for illness, work history, and food consumption history.

## **Results**

### *Epidemiologic*

#### *Case Finding*

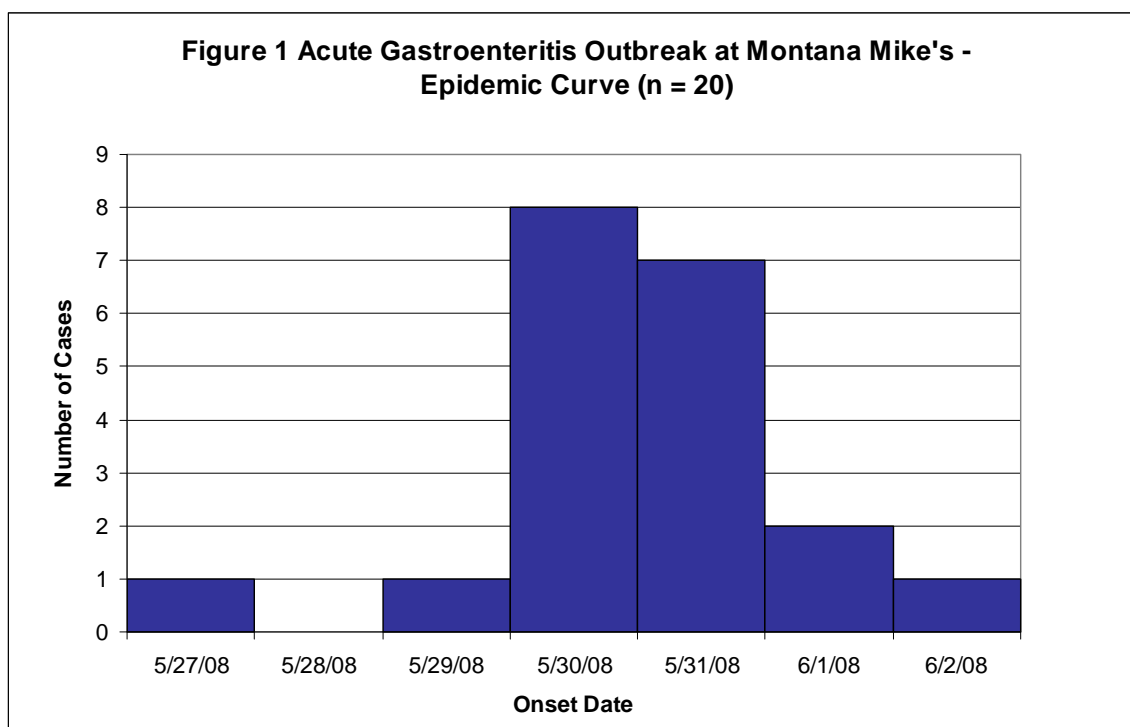
A total of 191 individuals were interviewed. Twenty individuals reported illness (10%). Nausea and diarrhea were the most frequently reported symptoms followed by vomiting, abdominal cramps, headache, and muscle aches (Table 1). Only one individual reported seeking medical care for their illness. Fourteen of the cases were female (70%).

**Table 1: Clinical Information of Cases (n=20)**

<b>Symptoms</b>	<b>Number (%)*</b>
Nausea	14 (74 %)
Diarrhea	14 (70 %)
Vomiting	13 (65 %)
Abdominal Cramps	12 (60 %)
Headache	5 (28 %)
Muscle Aches	3 (16 %)

\*Symptom information was incomplete for some cases.

Onset dates of illness ranged from May 27 to June 2 (Figure 1). The incubation period ranged from 15 minutes to 14.5 hours, with a median of 50 minutes.



### Case Control Study

One hundred seventy-one respondents met the control definition. Of those, 72 (42%) were randomly selected and matched to cases by date of exposure. Two individuals, who dined at the restaurant before May 30, were excluded from the case-control study because they could not be matched by date of exposure to any controls.

The distribution of sex and age for both cases and controls included in the study are shown in Table 2.

**Table 2 Characteristics of study population**

	Cases (n=18)	Controls (n=72)	Total (n=90)
	No. (%)	No. (%)	
Sex			
Female	13 (72)	41(57)	54 (60)
Male	5 (28)	31(43)	36 (40)
Age (yrs)			
Range	2 – 85	1 – 88	1 – 88
Median	44	40	40

Categories of menu items were analyzed for association with illness. Of those, eating any type of salad including garden salad, garden salad with cheese and bacon, or an entrée salad approached statistical significance. When type of dressing was analyzed, consuming ranch dressing was significantly associated with illness (table 3).

**Table 3: Exposure Information**

Menu Category	Adjusted OR	95% CI	P value
Appetizer	0.41	0.08 – 2.14	0.29
Entrée Salad	0.66	0.19 – 2.34	0.52
Steak Dinner	1.18	0.20 – 7.10	0.86
Seafood Dinner	0.99	0.06 – 17.00	0.99
Favorite Dinner	1.01	0.15 – 6.71	0.99
Burger or Sandwich	2.29	0.11 – 48.97	0.60
Kids Meal	1.31	0.09 – 18.30	0.84
Side Dish	0.61	0.04 – 9.80	0.73
Any Salad	4.40	0.89 – 21.71	0.06
Dressing			
Ranch	5.43	1.32 - 22.39	0.019
Dorothy Lynch	5.92	0.41 - 85.55	0.192
Thousand Island	2.32	0.20 - 26.94	0.502
Bleu Cheese	5.92	0.73 - 47.72	0.095

## *Environmental*

One critical violation was noted during the environmental inspection: an unclean food contact surface. However, prior to the inspection of the establishment, the restaurant had been closed, cleaned thoroughly, and food that was served on May 30 and May 31 was discarded. Of the forty-five employees who completed the employee questionnaire, five employees reported symptoms. Onset dates of illness ranged from May 27 to June 1. Of the employees who reported illness, two of the five had consumed ranch dressing prior to their illness. It is unknown if the other three employees consumed ranch dressing prior to their illness. The ranch dressing served at the restaurant is prepared in-house by staff and contains buttermilk, ranch seasoning and mayonnaise.

## **Discussion**

This was an outbreak of acute gastroenteritis associated with a restaurant. The epidemiologic and clinical data collected during this outbreak are consistent with a point-source outbreak. The short incubation period and clinical symptoms are indicative of a bacterial intoxication possibly caused by *Staphylococcus aureus*. Intoxication by *S. aureus* is characterized by an abrupt onset of vomiting and/or diarrhea with symptoms occurring within a few minutes to eight hours after ingestion of the toxin-contaminated food. Statistical analysis revealed that consumption of ranch dressing was significantly associated with illness, but exactly how or when the homemade dressing became contaminated is unknown. Because no human specimens or food samples were available for laboratory testing, KDHE was unable to confirm the causative agent of this outbreak. *Staphylococcus* food intoxication is the most common type of food intoxication. *S. aureus* contamination can occur when someone handles food with bare hands, especially after touching the face or mouth, or has an exposed sore on hands or arms. Staphylococci are present in the nasal passages and throats and on the hair and skin of 50 percent or more of healthy individuals<sup>1</sup>. Foods commonly implicated in foodborne disease outbreaks caused by *S. aureus* include salad dressing, creamy, non-lettuce salads, cream-filled bakery products, sandwiches, and dairy-based products<sup>1</sup>.

To prevent the growth of *S. aureus* and the production of enterotoxins, ready to eat foods should be held at appropriate cold holding temperatures (< 42°C) to ensure that no toxin build up occurs. Proper food handling should also be implemented, including good hand washing before handling food and having minimal bare hand contact with food.

Acknowledgments – Local Health Department Staff and Office of Health Promotion Health Risk Studies Program Staff

Appendix A - Montana Mike's Outbreak Investigation Questionnaire

*Reported by: Sheri Anderson and Titilayo Aghoghovbia*

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<sup>1</sup> FDA, Foodborne Pathogenic Microorganisms and Natural Toxins Handbook, September 1999  
<http://www.cfsan.fda.gov/~mow/intro.html>.

### ***Our Vision and Mission***

*As the state's environmental protection and public health agency, KDHE promotes responsible choices to protect the health and environment for all Kansans.*

*Through education, direct services, and the assessment of data and trends, coupled with policy development and enforcement, KDHE will improve health and quality of life. We prevent injuries, illness, and foster a safe and sustainable environment for the people of Kansas.*

## **Appendix A**

**Kansas Department of Health and Environment  
Foodborne Illness Outbreak Investigation**

Hello. My name is [YOUR NAME], and I am calling from the Kansas Department of Health and Environment. We are working with the McPherson County Health Department to investigate gastrointestinal illnesses among persons who may have eaten at Montana Mike's in McPherson from Thursday, May 29 through Sunday, June 1. To help with our investigation the restaurant owner has provided us a list of names of persons believed to have eaten at Montana Mike's during this time period. I am calling for [PATRON NAME].

Is he or she available?

If YES: Proceed to next paragraph when speaking with identified patron.

If NO: Is there a time that would be convenient for me to call back?

If YES: Record on Tracking Sheet.

If NO: Leave message for patron to return call to 866-445-1429.

[Repeat if necessary when speaking with correct PATRON: My name is [YOUR NAME], and I am calling from the Kansas Department of Health and Environment. We are working with the McPherson County Health Department to investigate gastrointestinal illnesses among persons who may have eaten at Montana Mike's in McPherson from Thursday, May 29 through Sunday, June 1. To help with our investigation the restaurant owner has provided us a list of names of persons believed to have eaten at Montana Mike's during this time period.]

To determine the cause of illness and to prevent future occurrences, we are collecting information from individuals who became ill as well as those that did NOT become ill. Your participation is completely voluntary, and any information you provide will be kept strictly confidential.

**Did you eat at Montana Mike's on Thursday, May 29, or Friday, May 30, or Saturday, May 31, or Sunday, June 1?** ☐ Yes ☐ No

**If NO: Thank you for your cooperation.**

**1. Last Name:** \_\_\_\_\_ **First Name:** \_\_\_\_\_ **2.**  
**Phone:** (\_\_\_\_) \_\_\_\_ - \_\_\_\_

**3. County:** \_\_\_\_\_ **4. Age:** \_\_\_\_\_ Years **5. Sex:** ☐ Male ☐ Female

**6. What date and time did you eat at Montana Mike's?** Date \_\_/\_\_/\_\_\_\_ Time \_\_\_\_:\_\_\_\_ ☐ a.m. ☐ p.m.

**Now we will ask about menu items that you consumed at Montana Mike's.**

**7. Did you eat any appetizers?** ☐ Yes ☐ No *If no, skip to question 8*

*Please check each menu item the interviewee had eaten*

Onion Rings	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Boneless Buffalo Wings	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Mountain Stuffed Mushrooms	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Fried Mushrooms	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Fried Zucchini	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Cheese Fries	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Potato Boats	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Chili Nachos	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

**8. Did you have any Entrée salads?** ☐ Yes ☐ No

*if no, skip to question 9*

***Please check each menu item the interviewee had eaten***

Dinner Salad	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Dinner Salad with Chicken Tenders	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Dinner Salad with Chicken Breast	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Dinner Salad with Grilled Shrimp	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Dinner Salad with Sirloin Steak	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Chicken Tostada Salad	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Buffalo Chicken Salad	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Chicken Caesar Salad	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

**What dressing did you have on your salad?** \_\_\_\_\_

**9. Did you have a Steak?** ☐ Yes ☐ No

*if no skip to question 10*

***Please check each menu item the interviewee had eaten***

Top Sirloin Steak	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Mike's Big Montana Steak	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Kansas City Strip	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Filet Mignon	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Ribeye Steak	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Cracked Peppercorn Sirloin	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
The '44' Sirloin	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Porterhouse	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Rancher's T-Bone	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Mushroom and Garlic Studded Ribeye	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

**10. Did you have a Combination Dinner?** ☐ Yes ☐ No

*if no skip to question 11*

***Please check each menu item the interviewee had eaten***

Steak and Shrimp	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
BBQ Chicken and Ribs	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Steak and Ribs	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

**11. Did you have Seafood?** ☐ Yes ☐ No

*if no skip to question 12*

***Please check each menu item the interviewee had eaten***

Grilled Shrimp	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Fried Shrimp	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Fried Catfish Strips	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Glazed Salmon	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Trout	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

**12. Did you have an Other Favorite?** ☐ Yes ☐ No

*if no skip to question 13*

***Please check each menu item the interviewee had eaten***

Pork Chops	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Mountain Topper – Chopped Sirloin	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Mountain Topper – Grilled Chicken	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Chicken Pasta Alfredo	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Italiano Chicken Pasta	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Kabobs	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know



Chicken Fried Sirloin Steak	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
BBQ Ribs	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Chicken Tenders	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Teriyaki Glazed Chicken	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Grilled Chicken Breast	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Chopped Sirloin Steak	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Beef Tips	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

**13. Did you have the Burgers or Sandwiches?** ☐ Yes ☐ No *if no skip to question 14*

*Please check each menu item the interviewee had eaten*

Grilled Chicken Breast	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Bacon Swiss Mushroom Burger	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Summit Burger	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Hamburger	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
BBQ Chicken	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Hickory Burger	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Ribeye Steak Sandwich	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Mountain Burger	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Roadhouse Grilled Chicken	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Chicken Fried Sirloin Sandwich	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Buffalo Burger	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

**14. Did you have anything from the kid's menu?** ☐ Yes ☐ No *if no skip to question 15*

*Please check each menu item the interviewee had eaten*

Hamburger	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Cheeseburger	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Chicken Strips	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Mini Corndogs	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Grilled Cheese Sandwich	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

**15. What sides did you have with your meal?**

*Please check each menu item the interviewee had eaten*

Baked Potato	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Loaded Baked Potato	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
French Fries	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Mashed Potatoes	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Sweet Potato	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Steamed Veggies	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Green Beans	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Cottage Cheese Salad	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Garden Salad	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Loaded Garden Salad	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

**What dressing did you have on your salad?**

Cinnamon Apple Slices	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Sliced Mushrooms	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Garlic Toast	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

**16. Did you have any dessert?** ☐ Yes ☐ No *if no skip to question 17*

*Please check each menu item the interviewee had eaten*

White Chocolate Cheesecake	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Chocolate cake	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Rocky Mountain Mudslide	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know
Carrot Cake	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Don't know

**17. Did you consume any other food items at Montana Mike's?** ☐ Yes ☐ No  
*If yes, please list* \_\_\_\_\_

**18. What did you drink?** ☐ Water ☐ Ice Tea ☐ Pepsi ☐ Diet Pepsi

☐ Sierra Mist ☐ Mountain Dew ☐ Dr. Pepper ☐ Coffee ☐ IBC Root Beer

☐ Bottle Beer ☐ Draft Beer ☐ Wine ☐ Mixed Drink (Grand Teton Ice Tea, Helena Ice Tea, Margarita, other) ☐ Other

\_\_\_\_\_

**19. Did you have ice in your drink?** ☐ Yes ☐ No ☐ Don't know

**20. Did you use any other condiments or dressing on your food?**

\_\_\_\_\_

**21. Did any of your food or drinks have an odd taste?** ☐ Yes ☐ No  
*If yes, did the food taste?*

☐ Metallic ☐ Acidic ☐ Bitter ☐ Sour ☐ Alcoholic ☐ Sweet ☐ Salty

☐ Other \_\_\_\_\_

**What was the food or drink item?** \_\_\_\_\_

**22. Did any food or drink item have an unusual odor?** ☐ Yes ☐ No  
*If yes, please describe the odor?* \_\_\_\_\_  
**What was the food or drink item?** \_\_\_\_\_

**23. Did the food or drink have an unusual texture or color?** ☐ Yes ☐ No  
*If yes, please describe the texture or color?* \_\_\_\_\_  
**What was the food or drink item?** \_\_\_\_\_

**24. Did you become ill after you ate or drank?** ☐ Yes ☐ No → *If no, skip to 32*

**25. When did you start feeling ill?** Date \_\_\_\_/\_\_\_\_/\_\_\_\_ Time \_\_\_\_:\_\_\_\_ ☐ a.m. ☐ p.m.

**26. What was your first symptom?** \_\_\_\_\_

**27. Did you have any of the following symptoms?**

Nausea? ☐ Yes ☐ No ☐ Don't know

Vomiting? ☐ Yes ☐ No ☐ Don't know

Stomach cramps? ☐ Yes ☐ No ☐ Don't know

Diarrhea?(more than 3 loose stools in a 24 hour period) ☐ Yes ☐ No ☐ Don't know

How many stools in a 24 hour period? \_\_\_\_\_

Bloody diarrhea? ☐ Yes ☐ No ☐ Don't know

Muscle Aches? ☐ Yes ☐ No ☐ Don't know

Headache? ☐ Yes ☐ No ☐ Don't know

Fever? ☐ Yes ☐ No ☐ Don't know

If yes, highest temperature? \_\_\_\_\_°F

Please indicate any other symptoms: \_\_\_\_\_

**28. Did you see a doctor or other healthcare professional for this illness?** ☐ Yes ☐ No

*If yes, provide name and phone number:* \_\_\_\_\_

**29. Were you hospitalized?** ☐ Yes ☐ No

*If yes, where?* \_\_\_\_\_

**30. Was a clinical specimen collected?** ☐ Yes ☐ No

**Type of Specimen:** \_\_\_\_\_ **Date Collected:** \_\_\_\_\_

**31. Are you still ill?** ☐ Yes ☐ No

*If no, when did you recover?* Date \_\_\_\_\_ Time \_\_\_\_\_

*The next few questions will ask about other persons who ate with you at Montana Mike's. We would like to interview everyone who lives in your household and ate at Montana Mike's on Thursday, May 29, or Friday, May 30, or Saturday, May 31, or Sunday, June 1.*

**32. How many other people, not including yourself, were in your dining party for any of the meals that you had at Montana Mike's ?** \_\_\_\_\_ people

*(If '0' skip to Q43; If '1 or more' go to Q33)*

**33. How many of the people, who ate with you at Montana Mike's, live in your household?**

\_\_\_\_\_ *(If '0' skip to Q42; If '1 or more' ask for their names and then go to Q34)*

Please provide me with their names:

#1 _____	#4 _____	#7 _____
#2 _____	#5 _____	#8 _____
#3 _____	#6 _____	#9 _____

**34. Are any of the people you have named under 12 years of age?** ☐ Yes ☐ No  
(If 'Yes' go to Q35; If 'No' go to Q36)

**35. May we ask you the same questions about their food exposures and illness information?** ☐ Yes ☐ No

(If 'Yes' conduct a separate interview for each child; If 'No' go to Q36)

**36. Are any of the people you have named between 12 and 17 years of age?** ☐ Yes ☐ No  
(If 'Yes' go to Q37; If 'No' go to Q39)

**37. May we ask him or her the same questions about their food exposures and illness information?**

☐ Yes ☐ No

(If 'Yes' conduct a separate interview for each child; If 'No' go to Q38)

**38. May we ask you the same questions about their food exposures and illness information?** ☐ Yes ☐ No

(If 'Yes' conduct a separate interview for each child; If 'No' go to Q39)

**39. Are any of the people you have named 18 years of age and older ?** ☐ Yes ☐ No  
(If 'Yes' go to Q40; If 'No' go to Q42)

**40. Is this person currently available to be interviewed?**

(This question needs to be asked for all persons named above).

#1	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Alternate time to call: _____
#2	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Alternate time to call: _____
#3	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Alternate time to call: _____
#4	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Alternate time to call: _____
#5	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Alternate time to call: _____
#6	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Alternate time to call: _____
#7	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Alternate time to call: _____
#8	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Alternate time to call: _____
#9	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Alternate time to call: _____

(If 'Yes', go to Q41; If 'No', ask when you can call back – If respondent provides an alternate phone number, contact the person at this number)

**41. May I speak with this person?**

#1	<input type="checkbox"/> Yes	<input type="checkbox"/> No
#2	<input type="checkbox"/> Yes	<input type="checkbox"/> No
#3	<input type="checkbox"/> Yes	<input type="checkbox"/> No
#4	<input type="checkbox"/> Yes	<input type="checkbox"/> No

- |    |                              |                             |
|----|------------------------------|-----------------------------|
| #5 | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| #6 | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| #7 | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| #8 | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| #9 | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

*(If 'Yes', conduct a separate interview for this person; If 'No' go to Q42)*

**42. Will you provide the contact information for the persons in your dining party who do not live in your household?** ☐ Yes ☐ No

Name _____	Phone: _____	Ill <input type="checkbox"/> Yes	<input type="checkbox"/> No
Name _____	Phone: _____	Ill <input type="checkbox"/> Yes	<input type="checkbox"/> No
Name _____	Phone: _____	Ill <input type="checkbox"/> Yes	<input type="checkbox"/> No
Name _____	Phone: _____	Ill <input type="checkbox"/> Yes	<input type="checkbox"/> No
Name _____	Phone: _____	Ill <input type="checkbox"/> Yes	<input type="checkbox"/> No
Name _____	Phone: _____	Ill <input type="checkbox"/> Yes	<input type="checkbox"/> No

**43. Do you have other comments or information you would like to share?**

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**Thank you for your cooperation. This information will help us determine the cause of illness and prevent future occurrences.**